

Configure Offline (Air-gapped) Licensing on 9800 WLC

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Introduction

This document describes how to configure offline (air-gapped) licensing on Catalyst 9800 Wireless LAN Controller (WLC).

Prerequisites

Requirements

Recommended knowledge of 9800 WLC and CSSM (Cisco Smart Software Manager) portal basic operation.

Components Used

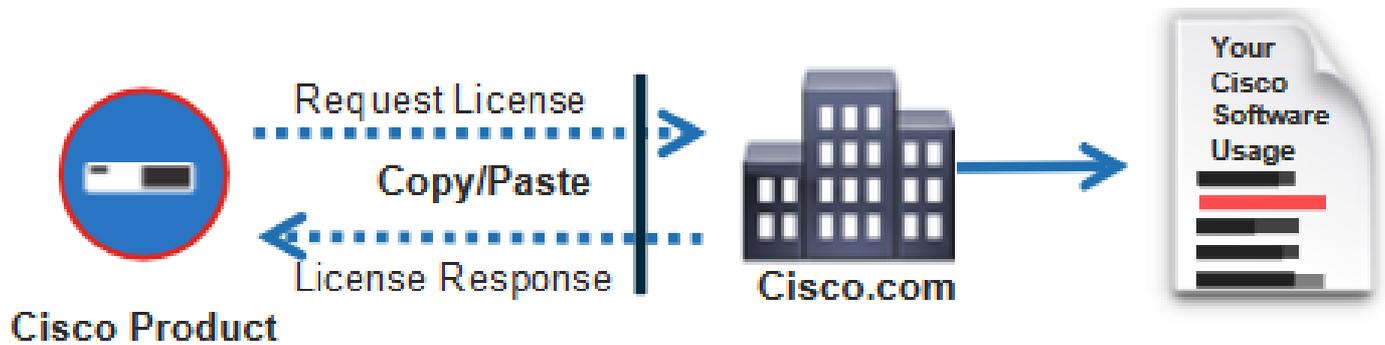
The information in this document is based on these software and hardware versions but applies to all versions after 17.3:

- Virtual 9800-CL WLC version 17.9.5

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure

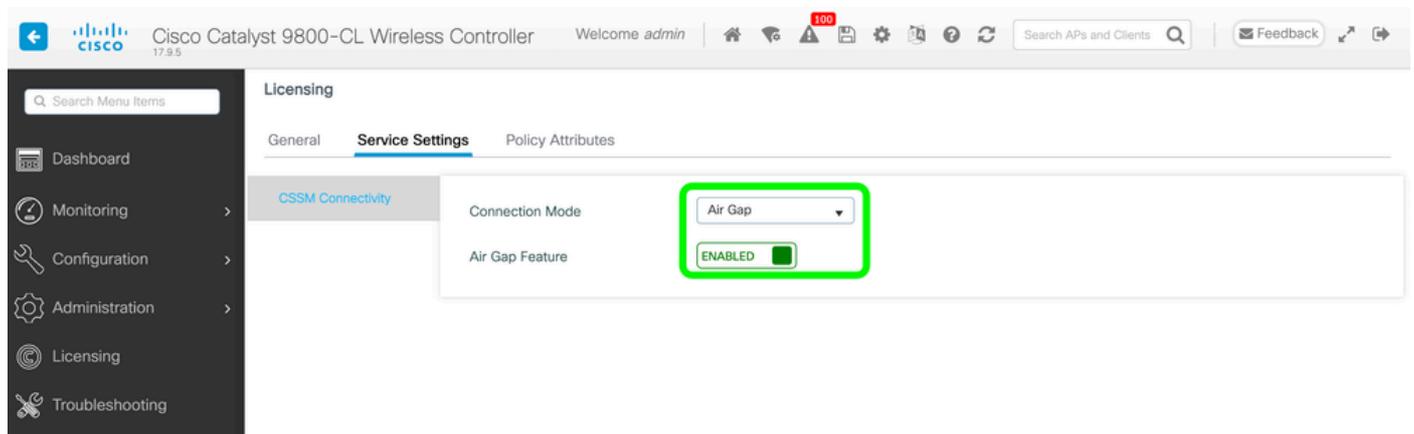
Network Diagram



Configurations

Step 1. On the WLC

1. Set Licensing connection mode to **Air Gap** and **AirGap Feature** to **Enabled**:



The CLI equivalent is:

```
9800-17-09-05(config)#license smart transport off
```

2. Export the RUM report from the WLC. This saves your current license consumption to a file:

```
9800-17-09-05#license smart save usage all file bootflash:rum.txt
```

Step 2. On the CSSM

1. Log into your CSSM account.

2. Navigate to **Reports** tab, then **Usage Data Files**. Click **Usage Data Files**:

Reports

Report **Usage Data Files** Reporting Policy Synch File for Device Controllers

Devices can be configured to report the features that they are using. This usage then determines which licenses are needed, in order to be compliant.

Upload Usage Data...

Usage Data File	Reported	Virtual Account	Reporting Status	Devices	Acknowledgement
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3. Click **Browse**, then select the RUM report that was obtained from the WLC. Click **Upload Data**:

Upload Usage Data

Please select the Usage File you wish to upload.

Usage Data File: **Browse** No File Chosen

Upload Data Cancel

4. Once the RUM report is uploaded to the CSSM, the **Download** button appears under the **Acknowledgement** column. Click **Download**:

Reports

Report **Usage Data Files** Reporting Policy Synch File for Device Controllers

Devices can be configured to report the features that they are using. This usage then determines which licenses are needed, in order to be compliant.

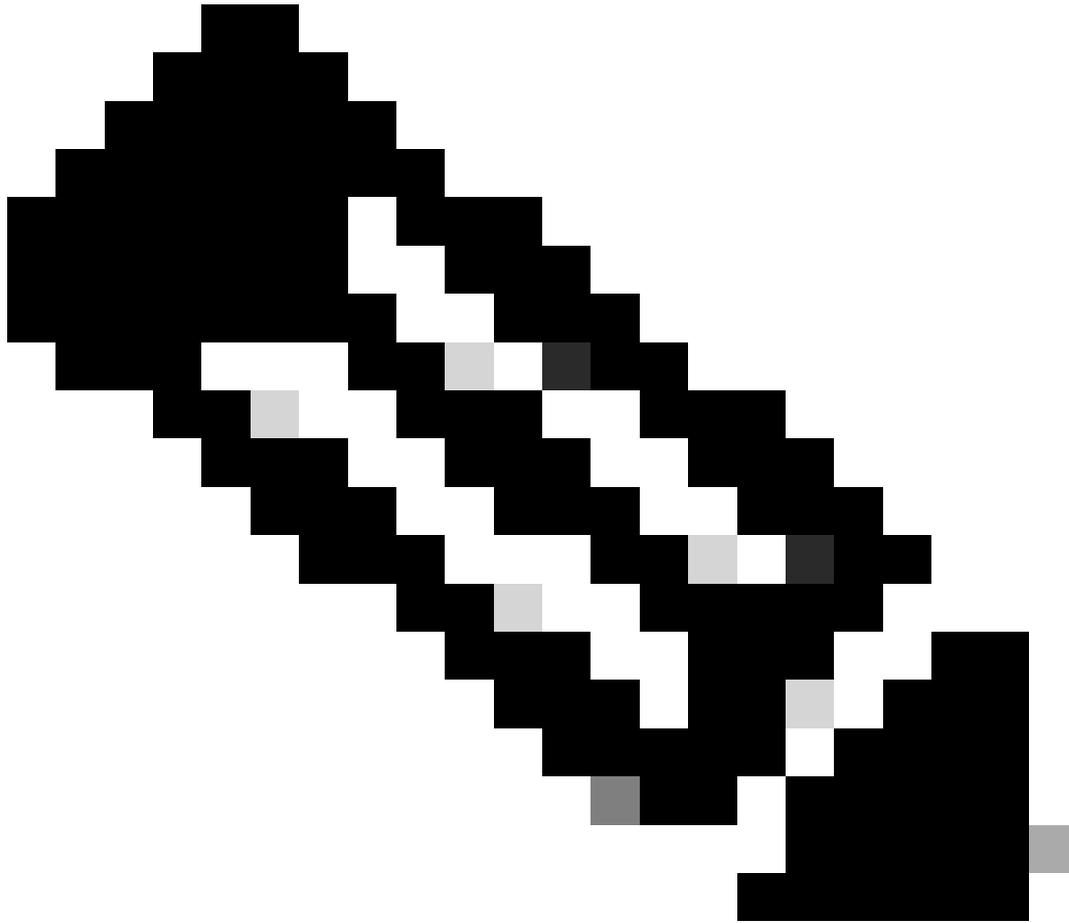
Upload Usage Data...

Usage Data File	Reported	Virtual Account	Reporting Status	Devices	Acknowledgement
rum.txt	2024-Feb-29		No Errors	2	Download

Step 3. On the WLC

Import the ACK on the WLC:

```
9800-17-09-05#license smart import bootflash:ACK_rum.txt  
Import Data Successful
```



Note: After a license factory reset, you must wait at least 1 hour to generate the RUM report.

Verify

After applying the configuration steps above, the WLC appears on the CSSM under **Inventory > Product Instances**.

If an active WLC from the HA pair was registered, both active and standby WLCs are shown under the **Product Instances** tab on CSSM.

Example of an output from a successfully configured WLC:

```
----- show license status -----
```

```
Utility:  
Status: DISABLED
```

Smart Licensing Using Policy:

Status: ENABLED

Account Information:

Smart Account: <Organization_Name> As of Feb 29 15:24:40 2024 UTC

Virtual Account: <Account_Name>

Data Privacy:

Sending Hostname: yes

Callhome hostname privacy: DISABLED

Smart Licensing hostname privacy: DISABLED

Version privacy: DISABLED

Transport:

Type: Transport Off

Policy:

Policy in use: Merged from multiple sources.

Reporting ACK required: yes (CISCO default)

Unenforced/Non-Export Perpetual Attributes:

First report requirement (days): 365 (CISCO default)

Reporting frequency (days): 0 (CISCO default)

Report on change (days): 90 (CISCO default)

Unenforced/Non-Export Subscription Attributes:

First report requirement (days): 90 (CISCO default)

Reporting frequency (days): 90 (CISCO default)

Report on change (days): 90 (CISCO default)

Enforced (Perpetual/Subscription) License Attributes:

First report requirement (days): 0 (CISCO default)

Reporting frequency (days): 0 (CISCO default)

Report on change (days): 0 (CISCO default)

Export (Perpetual/Subscription) License Attributes:

First report requirement (days): 0 (CISCO default)

Reporting frequency (days): 0 (CISCO default)

Report on change (days): 0 (CISCO default)

Miscellaneous:

Custom Id: <empty>

Usage Reporting:

Last ACK received: Feb 29 15:27:53 2024 UTC

Next ACK deadline: May 29 15:27:54 2024 UTC

Reporting push interval: 30 days

Next ACK push check: <none>

Next report push: Mar 30 15:27:54 2024 UTC

Last report push: Feb 29 15:27:54 2024 UTC

Last report file write: <none>

Trust Code Installed:

Active: PID:C9800-CL-K9,SN:<Serial_Number>

INSTALLED on Feb 29 15:27:53 2024 UTC

Standby: PID:C9800-CL-K9,SN:<Serial_Number_Stbdy>

INSTALLED on Feb 29 15:27:53 2024 UTC

Troubleshoot

If the RUM upload to the CSSM portal fails, it can be because your WLC is already registered through direct connection on the portal. Delete the device from the CSSM inventory. You can then upload the RUM

report.

References

- [Configure Licensing with SLUP](#)